

Coronary endarterectomy (CE) is the chosen technique for revascularization of diffuse and totally occluded coronary artery. The risk of perioperative events is higher in CE and long term prognosis is significantly worse than coronary artery bypass grafting (CABG) alone.

**Objectives:** (1) To compare the postoperative complication between CABG with CE and CABG alone. (2) To compare mortality between CABG with CE and CABG alone.

**Methods:** It is a retrospective observational single center study during the period from October 2005 to August 2010 in which we reviewed a 26 patients who underwent CABG with CE compared with 108 who underwent CABG alone. Bleeding was 7.1% in CABG with CE and 2.8% in CABG alone, 3.6% required intra-aortic balloon pump in CABG with CE while 0.9% in CABG alone. Patient who developed low cardiac output were 3.6% in CABG with CE and 2.8% in CABG alone. Mortality was 3.6% in CABG with CE and 0% in CABG alone.

**Conclusion:** CABG with CE increase morbidity and mortality than CABG alone.

doi:10.1016/j.jsha.2011.02.017

#### SHA 017. One year follow up of patients who underwent transcatheter aortic valve implantation (TAVI)

Saeed Al Ahmari, Husien Alamri, Ahmed Wl Watidy, Mohammed Al Otabi, Moheeb Abdullah, Saad Al Kasab  
Prince Sultan Cardiac Center, Adult Cardiology, Riyadh, Saudi Arabia

E-mail address: naman45@hotmail.com (S. Al Ahmari)

**Objectives:** TAVI is an emerging technique for treating non operable patients with severe aortic stenosis (AS). We report our one year clinical, and echo follow up of our TAVI program.

**Methods:** All patient who were eligible, and underwent TAVI therapy have been followed in our clinic, and echo lab at 6 and 12 months program. Detailed clinical, and echo evaluation have been performed for those patients.

**Results:** 33 pat were operated, with mean age of  $78.7 \pm 9.3$  y, 18 males, and 14 females. Minor stroke developed in 2 patients, and peripheral arterial complication in 3 patients, and permanent pacemaker inserted in 1 patient. The patients were followed for mean of  $12 \pm 6$  months. Two patients died within one week, and one died after 4 weeks giving mortality rate of 9.6%. On follow up, patients symptoms improved. The PG decreased from  $88 \pm 22$  mmHg to  $19 \pm 7$  mmHg,  $P < 0.0001$ , and the mitral regurgitation (MR) severity decreased from  $1.6 \pm 1.1$  to  $0.9 \pm 0.6$ ,  $P < 0.001$ . There were 2 patients who has moderate paravalvular leak, and 5 who had mild leak.

**Conclusion:** TAVI is promising technique in treating patients with severe AS with acceptable mortality rate. There was significant improvement in patient's symptoms, reduction in aortic gradient and reduction in MR severity.

doi:10.1016/j.jsha.2011.02.018

#### SHA 018. Seven years follow up of patients post mitral valve repair

Saeed Al Ahmari, Hmoud Moshabeek, Ghormallah Al Zahrani, Khalifa Ashmeg, Tahani Al Ajmi, Menwer Al Anazi  
Prince Sultan Cardiac Center, Adult Cardiology, Riyadh, Saudi Arabia

E-mail address: naman45@hotmail.com (S. Al Ahmari)

**Objectives:** Mitral valve (MV) repair has better outcome compared to mitral replacement. We aimed to evaluate the result of MV repair in a population with mainly rheumatic valve diseases.

**Methods:** Patients were enrolled prospectively, and have been evaluated pre and postoperatively by detailed serial echocardiographic studies.

**Results:** 100 patients with severe MR were enrolled prospectively with mean age of  $48.5 \pm 15.6$  y, 52% males and 48% females. Etiology was rheumatic in 30%, ischemic in 20%, prolapse in 37%, and degenerative in 10%. At 12 months, 88% had no or mild MR, and 9% had moderate MR, and 3% had moderately severe to severe MR. After  $5 \pm 2$  years, 15% had severe MR, and 25% had moderate MR. The left ventricle end systolic volume decreased from  $59 \pm 38.7$  to  $52.3 \pm 32.1$  ml,  $P < 0.001$ , end diastolic volume has decreased from  $112.3 \pm 57.2$  to  $88.4 \pm 38.5$  ml,  $P < 0.001$ , and left atrial volume  $45.8 \pm 24.7$  ml/ $m^2$  to  $38.4 \pm 17.3$  ml/ $m^2$ ,  $P < 0.001$ . The pulmonary systolic pressure decreased from  $48.9 \pm 17.5$  to  $37.7 \pm 8.9$  mmHg,  $P < 0.0001$ .

**Conclusion:** MV repair is possible in patients with different MV pathologies, including rheumatic valve disease with acceptable results. Left ventricular remodeling indices, left atrial volume and pulmonary artery pressure have improved after MV repair.

doi:10.1016/j.jsha.2011.02.019

#### SHA 019. Atrial fibrillation post cardiac surgery; risk factors and effects on morbidity and early 30 days mortality

Hamoud Yahya Obied, Mohammed Alreshidan, Abdulaziz Albaradai, Fahad Alghofaili, M. Alreshidan, H. Obied  
Prince Salman Heart Center, King Fahad Medical City, Cardiac Surgery, Riyadh, Saudi Arabia

E-mail address: obeidha@yahoo.com (H.Y. Obied)

**Introduction:** Atrial fibrillation (AF) is the most common complication after cardiac surgery and a major cause of morbidity and increased cost of care.

**Objective:** We tried to determine risk factors for atrial fibrillation in patients who underwent open heart surgery and whether it affects postoperative morbidity and hospital stay and early 30 days mortality in comparison to patient who do not developed AF.

**Methods:** It is a retrospective observational single center study from January 2006 to September 2010 in which all patient s who developed AF post cardiac surgery were included.

**Results:** Total number of patients who developed AF are 44 patients, 71% are male and 29% are female. 9.3% of patients with postoperative AF required permanent pacemaker compared to non AF patients 2.3%.

Mean hospital stay was 19.5 days on AF patients and 17 days in non AF patients. While mortality was 6.8% in AF patients and 7% in non AF patients.

**Conclusion:** Postoperative AF increase morbidity and hospital stay than non AF patients but no difference in early mortality rate.

doi:10.1016/j.jsha.2011.02.020

#### SHA 020. Impact of a nurse-led heart failure program on all cause mortality in Saudi Arabia

Bassam Bdeir, Mouaz Al Mallah, Tara Conboy, A. Mukhtar, H. Omer, R. Odeh, I. Farah, M. Al-Khateeb, A. Tayiem, R. Rabai, A. El Tayeeb, E. Fadel, D. Ali, H. Al Dossari